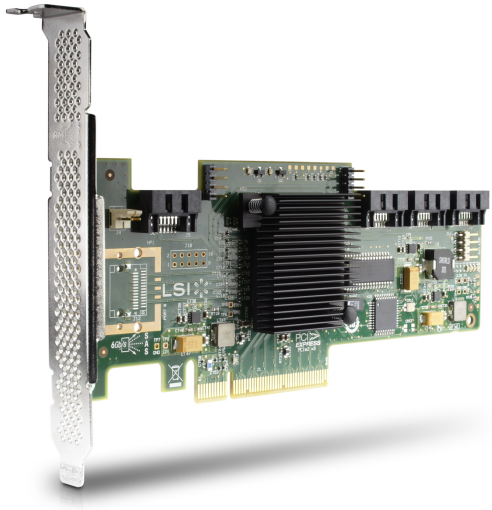
Overview



Models

LSI 9212 4-Port SAS 6Gb/s RAID Card	XP310AA

Introduction

The LSI 9212-4i adapter provides high performance data transfer rates for mission-critical applications running from SAS drives. The second generation SAS adapter allows for 256 SAS end-point devices and integrates the latest enhancements in PCI Express and SAS technology.

The adapter supports medium to large capacity internal workstation storage applications by connecting a 5GT/s, 8-lane PCI Express bus with four x1 SATA internal connectors. The adapter supports PCIe 2.0 and is backward compatible with existing products with PCIe 1.0 interface. New enhancements include End-to-End CRC (ECRC) with Advanced Error Reporting (AER), power management, hot plug support, and MSI/MSI-X and legacy interrupt generation.

The four-port controller provides SAS data transfer rates of 1.5, 3, and 6Gb/s per lane and automatically negotiates between the speeds. Enhanced features include T-10 Protection Information Model for early detection of and recovery from data corruption, and Spread Spectrum Clocking (SSC) for EMI reduction.

Overview

Key Features and Benefits

- 6 Gb/s per port, 4 internal ports
- Connects to SAS drives
- 5GT/s, 8-lane PCI Express 2.0 interface
- MD-2 small form-factor design
- Fusion-MPT architecture featuring over 290,000 I/Os per second
- Integrated RAID avoids additional host CPU overhead
- Supports major Operating Systems

Compatibility

The LSI 9212 SAS HBA is compatible with the HP Z400 and Z600 workstations.

NOTE: Not all models are available in all regions.

Service and Support

The LSI 9212 SAS HBAs have a one-year limited warranty or the remainder of the warranty of the HP host workstation (which ever is longer) in which they are installed. Technical support is available seven days a week, 24 hours a day by phone, as well as in online support forums. Certain restrictions and exclusions apply.

Technical Specifications

PCI Bus	8-lane, 5GT/s PCI Express 2.0	
PCI Modes	Bus Master DMA	
RAID Levels	RAID 0, 1, 1E and 10	
PCI Data Burst Transfer Rate	Half Duplex, x4 PCIe 2000 MB/s Full Duplex, x8 PCIe 4000 MB/s	
SAS Bandwidth	Half Duplex	Single lane - 600 MB/s Wide Port (2 lanes) - 1200 MB/s Wide Port (4 lanes) - 2400 MB/s
	Full Duplex	Single SAS Lane - 1200 MB/s Wide Port (2 lanes) -2400 MB/s Wide Port (4 lanes) - 4800 MB/s
PCI Card Type	3.3V Add-in card	
PCI Voltage	12 V ± 10%	
PCI Power	13.5 Watts	
Bracket	Full height and Low-profile	
Certification Level	PCI-Express 2.0	
IO Bus	1x4 6Gb/s SAS ports	
SAS Processor	LSISAS2008	
Internal Connectors	Four x1 SATA	
External Connectors	None	
Maximum Number of SCSI Devices	256	
LED Indicators	Internal Activity/Fault per x4 port - Heartbeat	
Temperature	Operating	0° to 55° C
	Storage	-45° to +105° C
Relative Humidity	Operating	5 to 90% non-condensing
	Storage	5 to 90% non-condensing
MTBF	>2,000,000 hours	
Compliances	EMC: Class B-US (CFR 47, P15B); Canada (ICES-003); Japan (V-3/02.04);Europe (EN55022/EN55024); Australia/New Zealand (AS/NZS 3548); Safety: EN60950	
Operating System Support	Microsoft® Windows® XP Professional, XP Professional 64-bit Genuine Windows Vista® Business 32-bit and 64-bit Genuine Windows 7 Professional 32-bit and 64-bit. Linux SLED and RHEL.	
Kit Contents	Controller card, driver CD, LED cables, user documentation and warranty card.	

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